

WASHINGTON, DC 20510

September 23, 2022

The Honorable Michael S. Regan Administrator United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Mail Stop 1301A Washington, DC 20460

## Dear Administrator Regan:

As you know, the United States Court of Appeals for the Ninth Circuit recently vacated the most recent human health assessment for glyphosate conducted by the Environmental Protection Agency (EPA).<sup>1</sup> In order to protect our nation's public health, I write to urge the EPA to properly follow its Guidelines for Carcinogen Risk Assessment when finalizing the agency's registration review decision for glyphosate in accordance with this court decision.

Glyphosate is the most widely used pesticide in the world. It is applied to an average of 298 million acres annually in the United States alone.<sup>2</sup> Glyphosate is generally applied by being sprayed from planes, ground equipment, or handheld devices. Workers and residential users are exposed to glyphosate when they handle the chemical during application or enter areas where it was recently sprayed.<sup>3</sup> The vast majority of agricultural laborers belong to Black, Indigenous, and People of Color (BIPOC) and low income communities.<sup>4</sup> People are also exposed to glyphosate when they eat food from crops treated with it and traces of the herbicide are found in many foods, ranging from honey and wine to cereal and hummus.<sup>5</sup> According to a recent study by the Centers for Disease Control and Prevention (CDC), 87 percent of 650 children tested had detectable levels of glyphosate in their urine.<sup>6</sup>

In March 2015, The World Health Organization's International Agency for Research on Cancer (IARC) determined that glyphosate is "probably carcinogenic to humans." Independent research has also linked glyphosate to a range of human health impacts, from increasing risk of kidney disease in farming

<sup>&</sup>lt;sup>1</sup> Natural Resources Defense Council; Pesticide Action Network North America v. U.S. Environmental Protection Agency, No. 20-70787 (9<sup>th</sup> Cir. 2022), <a href="https://www.thenewlede.org/wp-content/uploads/2022/06/9th-circuit-on-glyphosate.pdf">https://www.thenewlede.org/wp-content/uploads/2022/06/9th-circuit-on-glyphosate.pdf</a>

<sup>&</sup>lt;sup>2</sup> Charmaine Hanson and Caleb Hawkins, "Memorandum RE: Glyphosate: Response to Comments, Usage, and Benefits (PC Codes: 103601, 103604, 103605, 103607, 103608, 103613, 417300)", *United States Environmental Protection Agency* (2019), <a href="https://www.epa.gov/sites/default/files/2019-04/documents/glyphosate-response-comments-usage-benefits-final.pdf">https://www.epa.gov/sites/default/files/2019-04/documents/glyphosate-response-comments-usage-benefits-final.pdf</a>

<sup>&</sup>lt;sup>3</sup> Natural Resources Defense Council; Pesticide Action Network North America v. U.S. Environmental Protection Agency, No. 20-70787 (9<sup>th</sup> Cir. 2022), <a href="https://www.thenewlede.org/wp-content/uploads/2022/06/9th-circuit-on-glyphosate.pdf">https://www.thenewlede.org/wp-content/uploads/2022/06/9th-circuit-on-glyphosate.pdf</a>

<sup>&</sup>lt;sup>4</sup> Nathan Donley, Robert D. Bullard, Jeannie Economos, Iris Figueroa, Jovita Lee, Amy K. Liebman, Dominica Navarro Martinez and Fatemeh Shafiei, "Pesticides and environmental injustice in the USA: root causes, current regulatory reinforcement and a path forward," *BMC Public Health*, 22 (2022), https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-13057-4

<sup>&</sup>lt;sup>5</sup> Michelle L. Ledoux, Navam Hettiarachchy, Xiaofan Yu, Luke Howard, Sun-Ok Lee, "Penetration of glyphosate into the food supply and the incidental impact on the honey supply and bees," *Food Control*, 109 (2020), https://www.sciencedirect.com/science/article/abs/pii/S0956713519304487

<sup>&</sup>lt;sup>6</sup> Centers for Disease Control and Prevention, "National Health and Nutrition Examination Survey," *Centers for Disease Control and Prevention* (2022), <a href="https://wwwn.cdc.gov/Nchs/Nhanes/2013-2014/SSGLYP\_H.htm">https://wwwn.cdc.gov/Nchs/Nhanes/2013-2014/SSGLYP\_H.htm</a>

<sup>&</sup>lt;sup>7</sup> International Agency for Research on Cancer, "IARC Monographs Volume 112: evaluation of five organophosphate insecticides and herbicides," *World Health Organization* (2015), <a href="https://www.iarc.who.int/wp-content/uploads/2018/07/MonographVolume112-1.pdf">https://www.iarc.who.int/wp-content/uploads/2018/07/MonographVolume112-1.pdf</a>



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communities to shortened pregnancies and lowered birth weight.<sup>89</sup> Coupled with ecological concerns, this has since prompted eleven countries to ban and thirteen countries to significantly restrict glyphosate.<sup>10</sup>

However, EPA has continuously asserted the safety of glyphosate. In October 2015, despite the IARC's findings earlier that year, EPA's Cancer Assessment Review Committee released a memorandum finding that glyphosate is "Not Likely to be Carcinogenic to Humans." According to the Ninth Circuit Court decision, EPA's Office of Research and Development expressed concerns regarding the Cancer Assessment Review Committee's failure to follow its cancer assessment guidelines. The agency ignored these concerns.

Then, in 2016, EPA issued the "Glyphosate Issue Paper: Evaluation of Carcinogenic Potential" and consulted the agency's Scientific Advisory Panel. This panel then issued its own concerns, similar to those of the Office of Research and Development, that EPA failed to follow its cancer assessment guidelines. <sup>12</sup> Once again, the agency disregarded these concerns and, in 2017, released a draft risk assessment finding that glyphosate poses no serious human health risks. EPA's most recent assessment, the January 2020 Interim Registration Review Decision for glyphosate which was subsequently struck down by United States Court of Appeals for the Ninth Circuit, reaffirmed this stance. <sup>13</sup>

Given the serious risks associated with glyphosate, the agency's pattern of failing to adhere to its cancer assessment guidelines and the court's vacatur of the human health portion of the agency's most recent human health assessment, EPA must ensure the most rigorous final assessment possible. It is unacceptable for the agency to continue to reassert conclusions built on inconsistent findings.

I urge the EPA to closely follow its Guidelines for Carcinogen Risk Assessment in its current review of glyphosate in order to protect our nation's public health from this dangerous chemical.

Sincerely,

Cory A. Booker

**United States Senator** 

<sup>&</sup>lt;sup>8</sup> Jayasumana, C., Gunatilake, S., & Senanayake, P., "Glyphosate, hard water and nephrotoxic metals: are they the culprits behind the epidemic of chronic kidney disease of unknown etiology in Sri Lanka?" *International journal of environmental research and public health*, 11(2), 2125-2147 (2014). <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945589/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945589/</a>

<sup>&</sup>lt;sup>9</sup> Parvez, S., Gerona, R. R., Proctor, C., Friesen, M., Ashby, J. L., Reiter, J. L., ... & Winchester, P. D., "Glyphosate exposure in pregnancy and shortened gestational length: a prospective Indiana birth cohort study," *Environmental Health*, 17(1), 1-12 (2018), https://ehjournal.biomedcentral.com/articles/10.1186/s12940-018-0367-0

<sup>&</sup>lt;sup>10</sup> Baum Hedlund, "Where is Glyphosate Banned?" Baum Hedland (2022), <a href="https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned-/">https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned-/</a>

<sup>&</sup>lt;sup>11</sup> Jess Rowland, Karlyn Middleton, "Memorandum RE: Glyphosate: Report of the Cancer Assessment Review Committee," *United States Environmental Protection Agency, Office of Chemical Safety and Pollution Prevention* (2015).

<sup>&</sup>lt;sup>12</sup> Steven M. Knott, "Memorandum RE: Transmission of Meeting Minutes and Final Report of the December 13-16, 2016 FIFRA SAP Meeting Held to Consider and Review Scientific Issues Associated with EPA's Evaluation of the Carcinogenic Potential of Glyphosate," *United States Environmental Protection Agency, Office of Chemical Safety and Pollution Prevention* (2016), <a href="https://www.epa.gov/sites/default/files/2017-03/documents/december-13-16">https://www.epa.gov/sites/default/files/2017-03/documents/december-13-16</a> (2016 final report 03162017.pdf

<sup>&</sup>lt;sup>13</sup> Elissa Reaves, "Glyphosate: Interim Registration Review Decision Case Number 0178," *Environmental Protection Agency* (2020), https://www.epa.gov/sites/default/files/2020-01/documents/glyphosate-interim-reg-review-decision-case-num-0178.pdf